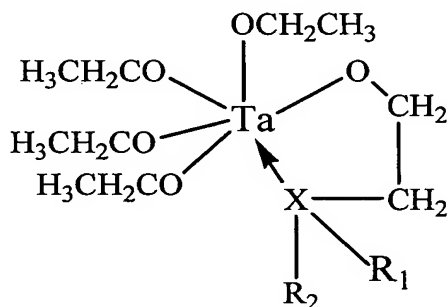


In the Claims:

1. (Original) A semiconductor capacitor comprising:
a first electrode;
a second electrode; and
a tantalum oxide layer positioned between said first electrode and said second electrode, said tantalum oxide layer formed by depositing at least one precursor and ozone gas, the at least one precursor represented by the formula:



wherein X is selected from the group consisting of nitrogen, sulfur, oxygen, and a carbonyl group; and

R₁ and R₂ are independently alkyl.

2. (Original) The semiconductor capacitor according to Claim 1, wherein R₁ and R₂ are independently selected from C₁ to C₄ alkyl.

3. (Original) The semiconductor capacitor according to Claim 1, wherein R₁ and R₂ are each methyl and X is nitrogen.

4. (Original) The semiconductor capacitor according to Claim 1, wherein the first electrode comprises at least one material selected from the group consisting of polysilicon, a noble metal, and a conductive metal nitride.

5. (Original) The semiconductor capacitor according to Claim 4, wherein the noble metal is selected from the group consisting of Ru, Ir, Pt, and combinations thereof.

6. (Original) The semiconductor capacitor according to Claim 4, wherein the conductive metal nitride is selected from the group consisting of TiN, TaN, WN, and combinations thereof.

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7. (Original) The semiconductor capacitor according to Claim 1, wherein the second electrode comprises at least one material selected from the group consisting of polysilicon, a noble metal, and a conductive metal nitride.

8. (Original) The semiconductor capacitor according to Claim 7, wherein the noble metal is selected from the group consisting of Ru, Ir, Pt, and combinations thereof.

9. (Original) The semiconductor capacitor according to Claim 7, wherein the conductive metal nitride is selected from the group consisting of TiN, TaN, WN, and combinations thereof.

10. (Original) The semiconductor capacitor of Claim 1, wherein the tantalum oxide layer is deposited at a temperature ranging of from about 100°C to about 600°C.

Claims 11-20 (Canceled without prejudice).
